

Claims

1. A circuit arrangement having
5 a component (2) to be cooled,

 comprising

10 an electrical component in the form of a heat sink, which is an active part of the circuit arrangement, in particular an inductive component (4) having a core, and

15 a heat transfer device (3), which is arranged between the component (2) to be cooled and the electrical component in the form of a heat sink such that it is in direct contact with the two for the purpose of removing heat from the component (2) to be cooled.
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2. The circuit arrangement as claimed in claim 1, in which the heat transfer device (3) comprises a resilient mat.
- 25 3. The circuit arrangement as claimed in claim 2, in which the mat is produced from a foamed mass.
4. The circuit arrangement as claimed in claim 1, in which the inductive component (4) is a
30 transformer.
5. The circuit arrangement as claimed in claim 1, in which the component (2) to be cooled is an integrated circuit.

6. The circuit arrangement as claimed in claim 4, in which the component (2) to be cooled is an integrated circuit.
- 5 7. The circuit arrangement as claimed in claim 1, which has two or more components (2) to be cooled, the heat transfer device (3) being arranged jointly thereover.
- 10 8. A method for cooling an electronic component (2) of an electrical circuit by providing the component (2) to be cooled of the electrical circuit,
- 15 providing an electrical component, actively participating in the electrical circuit, in the form of a heat sink, in particular an inductive component (4), which has a core, and
- 20 inserting a heat transfer device (3) between the component (2) to be cooled and the component acting as the heat sink such that it is in direct contact with the two for the purpose of removing heat from the component (2) to be cooled.
- 25 9. The method as claimed in claim 8, in which the heat transfer device (3) comprises a resilient mat.
- 30 10. The method as claimed in claim 9, in which the mat is produced from a foamed mass.
- 35 11. The method as claimed in claim 8, in which the inductive component (4) is a transformer.

12. The method as claimed in claim 8, in which the component (2) to be cooled is an integrated circuit.
- 5 13. The method as claimed in claim 11, in which the component (2) to be cooled is an integrated circuit.
- 10 14. The method as claimed in claim 8, in which two or more components (2) to be cooled are provided, which are cooled jointly with the aid of the heat transfer device (3) on the component acting as the heat sink.